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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,913	03/12/2004	Donald G. Newberg	CM06187H	8294
22917	7590	11/03/2004	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			VOLPER, THOMAS E	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,913

Applicant(s)

NEWBERG ET AL.

Examiner

Thomas Volper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-12 and 15-22 is/are rejected.
- 7) ☒ Claim(s) 6-8, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/12/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 12, 15-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vayrynen (US 6,256,304) in view of Wright et al. (US 2003/0193963).

Regarding claims 1 and 12, Vayrynen discloses defining a plurality bursts wherein each burst comprises a field embedded within the burst; and wherein the field is one of a synchronization field and a signaling field; and wherein, when the field is a synchronization field, defining a position of at least one subsequent burst comprising the synchronization field (col. 6, lines 38-64). Vayrynen fails to expressly disclose defining a position of at least one subsequent burst comprising a signaling field. Wright discloses a superframe containing control fields in each time slot. These control fields may be used for sync bursts as well as other control information such as orderwire information, and meet the limitation of a signaling field (paragraph [0025]). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the sync field as a control field for carrying either synchronization information or signaling information. One of ordinary skill in the art would have been motivated to do this to reduce cell delay variation and irregular cadence when transmitting both signaling information and synchronization in a shared channel.

Regarding claim 2, as described above, it is obvious to use one field in a burst to transmit either synchronization information or signaling information. Signaling information such as orderwire information is non-voice information.

Regarding claim 3, as mentioned above, Wright discloses orderwire information as an example of control information, which meets the limitation of link control information.

Regarding claims 15 and 16, Vayrynen discloses receiving a burst comprising a payload and a synchronization field, wherein the synchronization field comprises a synchronization pattern; selecting a target synchronization pattern dependent on an operating mode; comparing the received synchronization pattern against the target synchronization pattern; and if the received synchronization pattern is substantially similar to the target synchronization pattern, processing the payload; otherwise, discarding the burst (col. 1, line 66 – col. 2, line 35 and col. 6, lines 38-64). Vayrynen discloses that the operating mode the expectation of a reverse channel (col. 2, lines 13-15).

Regarding claims 17, 18, and 22, Vayrynen in view of Wright discloses receiving a synchronization field, wherein the synchronization field comprises a synchronization pattern; comparing the received synchronization pattern against a first known synchronization pattern and a second known synchronization pattern; if the received synchronization pattern is substantially similar to the first known synchronization pattern, selecting a first operating mode; and if the received synchronization pattern is substantially similar to the second known synchronization pattern, selecting a second operation mode (col. 1, line 66 – col. 2, line 35 and col. 6, lines 38-64). Vayrynen in view of Wright fails to expressly disclose the synchronization patterns have the same length, and are defined according to ANSI.102.BAAA. The

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ANSI.102.BAAA standard is well known and provides for common length sync patterns. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use an ANSI.102.BAAA standard sync pattern. One of ordinary skill in the art would have been motivated to do this because it provides a standard method of selecting different operating modes according to sync patterns.

3. Claims 4, 5, 11, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vayrynen (US 6,256,304) in view of Wright et al. (US 2003/0193963) as applied to claims 1-3, 12, 15-18 and 22 above, and further in view of Jordan et al. (US 2004/0083393).

Regarding claims 4, 5, 11, and 19-21, Vayrynen in view of Wright discloses a priori knowledge of the location of a burst carrying a signaling field (col. 6, lines 38-64). Vayrynen in view of Wright fails to expressly disclose framing information for the link control signaling in each burst comprising a signaling field. Jordan discloses framing information (915) for link control information (920) in a wireless network data structure (see Figure 7; paragraph [0072]). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the data structure of Jordan with a new password key identifier and new password in the control field of Vayrynen in view of Wright. One of ordinary skill in the art would have been motivated to do this to provide encryption information to either a mobile terminal or base station, thus creating a secure connection.

4. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vayrynen (US 6,256,304) in view of Wright et al. (US 2003/0193963) and Jordan et al. (US

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2004/0083393) as applied to claims 4, 5, 11, and 19-21 above, and further in view of Fackenthal et al. (US 2003/0061558).

Regarding claim 9, Vayrynen in view of Wright and Jordan fails to expressly disclose using an error correcting method comprising a matrix with rows encoded with a block code, and columns encoded with a parity checksum. Fackenthal discloses an error correcting matrix with Hamming code encoded rows and parity coded columns (see claims 1-3). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the error correcting algorithm of Fackenthal on the signaling field of Vayrynen in view of Wright and Jordan. One of ordinary skill in the art would have been motivated to do this to provide important signaling information from being lost or corrupted.

Regarding claim 10, although Fackenthal discloses a Hamming code, Fackenthal fails to expressly disclose a Hamming(16,11) code. However, it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on Applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use a Hamming(16,11) code in the error correcting algorithm provided by Vayrynen in view of

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Wright, Jordan, and Fackenthal. One of ordinary skill in the art would have been motivated to do this to optimize the error correcting for a particular system.

Allowable Subject Matter

5. Claims 6-8, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Claims 6-8 disclose the signaling field defines an indicator to identify that payload in a burst begins a new packet, identify that payload in a burst completes a packet, and identify that payload in a burst does not begin or complete a packet. The closest prior art of record, Vayrynen (US 6,256,304) in view of Wright et al. (US 2003/0193963), fails to disclose such an indicator in a signaling field.

Claim 13 discloses comparing a received synchronization pattern to a first and second known synchronization pattern wherein if the received synchronization pattern is substantially similar to the first known synchronization pattern, processing the payload as voice; and if the received synchronization pattern is substantially similar to the second known synchronization pattern, processing the payload as non-voice. Although the closest prior art of record, Vayrynen (US 6,256,304) in view of Wright et al. (US 2003/0193963), discloses correlating received

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synchronization patterns to known patterns, it fails to disclose determining whether the payload contained in a burst is voice or non-voice form the synchronization pattern.

Conclusion

7. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is (571) 272-3151. The examiner can normally be reached between 8:30am and 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at (571) 272-3155. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Thomas E. Volper

TEV

October 12, 2004



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